

In the Claims

Please amend the claims as follows:

Cancel claims 5-8 and 13-34.

Please add the following claims:

1 ~~35.~~ An apparatus for facilitating enhanced interaction of vapor and liquid passing in counter-current flow through a process tower, said process tower having a wall and at least one tray supported therein, said at least one tray having a tray inlet area and a tray outlet area, said apparatus comprising:

a downcomer disposed above said at least one tray;

said downcomer being formed between a wall region and the wall of said process tower and having an outlet for the flow of liquid therefrom; and

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said downcomer outlet disposed above said tray inlet area, said downcomer outlet being formed by a lower edge of the wall region and the wall of said process tower and having a center and opposing end portions with the lower edge of the wall region being closer to the wall of said process tower at the center than at the opposing end portions so that more liquid flows through the opposing end portions of the downcomer outlet than through the center of the downcomer outlet, thereby providing substantially uniform flow of liquid across said tray.

2 ~~36.~~ The apparatus as set forth in claim ~~35~~, wherein said wall region includes a semi-conical wall that tapers to said downcomer outlet.

3 ~~37.~~ The apparatus as set forth in claim ~~35~~, wherein said lower edge of the wall region comprises multiple straight lines connected end-to-end.--